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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/603,523 | 06/23/2000 | Edward R. Howorka | P/3331-131 | 9886 |

7590 11/03/2003

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EXAMINER

KARMIS, STEFANOS

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3624

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,523

Applicant(s)

HOWORKA ET AL.

Examiner

Stefano Karmis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to Applicants' petition to withdraw final filed on September 22, 2003. The rejections are as stated below:

Response to Amendment

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Status of Claims

3. Claims 1-22 have been left as originally filed. Therefore claims 1-22 are under prosecution in this application.

Summary of this Office Action

4. Applicants' arguments filed on September 22, 2003 have been fully considered, and discussed in the next section below or within the following rejection are not deemed to be persuasive. Therefore, claims 1-22 are rejected as being unpatentable over the art cited below, and Applicants' request for allowance is respectfully denied.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togher et al. US Pat. No. 6,014,627 (hereinafter Togher).

Claims 1 and 7, Togher teaches a method and system for “anonymous trading that can identify the best bids and offers from those counterparties with which each client site is currently eligible to deal...(column 2, lines 16-18). Buying and selling is facilitated through a communication network (column 4, lines 66-67).

A plurality of order input devices are attached to the communication network (figure 1) to provide an electronic brokerage system to individual traders (column 6, lines 53-54).

The market distributors, which relay current market data (column 5, lines 11-12) are preferably supplemented by the arbitrator node performing criteria for matching buyers and sellers (column 5, lines 18-21).

“Arbitrator A updates an ordered list of available bids and an ordered list of available offers for the relevant currency pair, each ranked by price and time of receipt and containing data fields for indicating the Quantity of the Local Currency still available for purchase or sale and the Quantity reserved...(column 12, lines 19-25).”

“A corresponding QuoteAvailable message is then transmitted from the Maker’s Arbitrator A to the Market Distributor in its Trading Region...(column 12, lines 28-30).” The arbitrators allow for such functions as identifying possible matches between buyers and sellers (column 5, lines 20-21).

Togher fails to teach the use of a broker node, which specifically allows for deriving market views and provides a function for matching compatible orders. Togher does teach the use of Market Distributors and Arbitrator nodes, which together perform the same function as a Broker Node, by providing market views and matching eligible buyers with sellers (column 6, lines 12-23). Official Notice is taken that combining nodes is old and well known in the computer arts. Therefore it would have been obvious at the time of the Applicants’ invention that the teachings of Togher could be modified to combine the functions of the Market Distributor with the Arbitrator nodes into one Broker Node because it improves the efficiency of the system by decreasing the number of elements required in the structure and by allowing multiple tasks to be performed by one node instead of multiple nodes.

Claims 2 and 3, Togher teaches a permanent communication link between various arbitrators allows for distributing of price quotes to other devices so that traders in alternate regions can get price messages (column 5, 47-49).

Claim 4, Togher teaches a number of processing nodes (preferably in the form of MD's and ARB's) facilitate the distribution of price quotations and other market data and to execute transactions by matching eligible Market Makers with eligible Buyers and Sellers and by monitoring the transactions until they have been completed or aborted (column 6, lines 14-20).

Claim 5, Togher teaches, "As shown in FIG. 1, each client site has its dedicated client site computer under the control of a Floor Administrator (column 5, lines 3-6). The access nodes are responsible for "distributing market information" (column 2, lines 44-45) to the trader terminals. Connecting the various Arbitrators through a permanent communication link allows for distributing a market view to other devices so that traders in alternate regions can get price messages (column 5, 47-49).

Claim 6, Togher teaches, "DealVerify and DealVerifyOk messages are logged by and transmitted from the Maker's Market Access Node to the Taker's Market Access Node and vice versa (column 13, lines 14-16). The message is also transmitted to other Trading Floors (column 13, lines 24-25).

Claim 8, Togher teaches “A corresponding QuoteAvailable message is then transmitted from the Maker’s Arbitrator A to the Market Distributor in its Trading Region...(column 12, lines 28-30).”

Claim 9, Togher teaches a system with the use of “logical links” to ensure that messages sent in a certain order are guaranteed to reach their destination in the same order. “The communication network is preferably provided with sufficient error detection, error correction, and network self-repair capabilities to guarantee that messages sent via these logical links are error free” (column 6, lines 1-11).

Claim 10, Togher teaches market distributors that typically analyze and distribute current market data (column 5, lines 11-12) and arbitrators allow for distributing of price quotes to traders in multiple regions (column 5, 47-49).

Claim 11, Togher teaches, “each client site preferably provides the system with only limited credit information for each potential counterparty (for example, a one bit flag indicating whether a predetermined limit has already been exceeded) and each bid or offer for a particular type of financial instrument is preferably prescreened by the system for compatibility with that limited credit information before calculating an anonymous "Dealable" price for presentation to any of the traders dealing with that particular financial instrument” (column 2, lines 23-32).

Claim 12, Togher teaches, “Arbitrator A updates an ordered list of available bids and an ordered list of available offers for the relevant currency pair, each ranked by price and time of receipt and containing data fields for indicating the Quantity of the Local Currency still available for purchase or sale and the Quantity reserved by the Arbitrator pending completion or failure of a pending deal resulting from a potential match initiated by the arbitrator...” (column 12, lines 19-27).

Claim 13 and 19, Togher teaches a method and a system that “relates generally to a electronic brokerage system having a communication network connecting traders dealing in financial instruments, and more particularly to a computerized system for distributing anonymous price quotes...(column 1, lines 12-16).

A plurality of order input devices are attached to the communication network (figure 1) to provide an electronic brokerage system to individual traders (column 6, lines 53-54).

Updating the displayed price, “the vocalized information will normally include only the least significant digits (Pips) of the displayed Dealeable bid and offer prices, as well as status changes for any recent quotes or hits initiated by the trader” (column 9-10, lines 65-1).

A plurality of market access, market distributors and arbitrators are connected with the order input terminals on the communication network (figure 1).

The market distributors, which relay current market data (column 5, lines 11-12) are preferably supplemented by the arbitrator node performing criteria for matching buyers and sellers (column 5, lines 18-21).

“A corresponding QuoteAvailable message is then transmitted from the Maker’s Arbitrator A to the Market Distributor in its Trading Region...(column 12, lines 28-30).” The arbitrators allow for such functions as identifying possible matches between buyers and sellers (column 5, lines 20-21).

Togher fails to teach the use of a broker node, which specifically allows for deriving market views and provides a function for matching compatible orders. Togher does teach the use of Market Distributors and Arbitrator nodes, which together perform the same function as a Broker Node, by providing market views and matching eligible buyers with sellers (column 6, lines 12-23). Official Notice is taken that combining nodes is old and well known in the computer arts. Therefore it would have been obvious at the time of the Applicants’ invention that the teachings of Togher could be modified to combine the functions of the Market Distributor with the Arbitrator nodes into one Broker Node because it improves the efficiency of the system by decreasing the number of elements required in the structure and by allowing multiple tasks to be performed by one node instead of multiple nodes.

Claim 14, Togher teaches, “The host computer uses the information in its central data base to match active bids and offers (as well as executing any transitory "hit bid" and "take offer" transactions) based on matching criteria which include the gross counterparty credit limit between counterparties to a potential matching transaction, price, and available quantity. To that end, each client site establishes and may subsequently vary or reset a credit limit for each possible counterparty, which is used by the host computer to establish the gross counterparty

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credit limit for each possible pair of parties and which is equal to the minimum of the remaining credit (initial credit limit less any applicable transactions that have already been executed) from the first party to the second party and from the second party to the first party” (column 1, lines 28-41).

Claim 15, the communication network is arranged in a clique tree configuration (figure 1).

Claim 16, Togher teaches, “it should be understood that each Arbitrator also maintains a log of potential matches which have not yet been verified or canceled by the affected Market Access Node’s, and that if these potential matches are not resolved within a predetermined time period, a similar automated rollback/recovery process can update the ARB’s log...” (column 13, lines 34-40).

“A number of processing nodes (preferably in the form of MD's and ARB's) facilitate the distribution of price quotations and other market data and to execute transactions by matching eligible Market Makers with eligible Buyers and Sellers and by monitoring the transactions until they have been completed or aborted...” (column 6, lines 14-20).

Claim 17, Togher teaches a corresponding QuoteAvailable message is then transmitted from the Maker’s Arbitrator A to the Market Distributor in its Trading Region and to the other Arbitrators for eventual distribution to other Trading Regions (column 12, lines 28-32).

Messages verifying the transaction are also transmitted to the other Trading Floors (column 13, lines 23-25).

Claim 18, Togher teaches a market view that provides a best Dealable price to the Trader Profile panel, which is the best price available to that trader (column 8, line 38-40).

Claim 20, Togher teaches, "The host computer uses the information in its central data base to match active bids and offers (as well as executing any transitory "hit bid" and "take offer" transactions" (column 1, lines 28-29).

A plurality of order input devices are attached to the communication network (figure 1) to provide an electronic brokerage system to individual traders (column 6, lines 53-54).

A plurality of market access, market distributors and arbitrators are connected with the order input terminals on the communication network (figure 1).

The market distributors, which relay current market data (column 5, lines 11-12) are preferably supplemented by the arbitrator node performing criteria for matching buyers and sellers (column 5, lines 18-21).

"Arbitrator A updates an ordered list of available bids and an ordered list of available offers for the relevant currency pair, each ranked by price and time of receipt and containing data fields for indicating the Quantity of the Local Currency still available for purchase or sale and the Quantity reserved...(column 12, lines 19-25)."

"A corresponding QuoteAvailable message is then transmitted from the Maker's Arbitrator A to the Market Distributor in its Trading Region...(column 12, lines 28-30)." The

arbitrators allow for such functions as identifying possible matches between buyers and sellers (column 5, lines 20-21).

Togher fails to teach the use of a broker node, which specifically allows for deriving market views and provides a function for matching compatible orders. Togher does teach the use of Market Distributors and Arbitrator nodes, which together perform the same function as a Broker Node, by providing market views and matching eligible buyers with sellers (column 6, lines 12-23). Official Notice is taken that combining nodes is old and well known in the computer arts. Therefore it would have been obvious at the time of the Applicants' invention that the teachings of Togher could be modified to combine the functions of the Market Distributor with the Arbitrator nodes into one Broker Node because it improves the efficiency of the system by decreasing the number of elements required in the structure and by allowing multiple tasks to be performed by one node instead of multiple nodes.

Claim 21, Togher teaches, "each client site establishes and may subsequently vary or reset a credit limit for each possible counterparty, which is used by the host computer to establish the gross counterparty credit limit for each possible pair of parties and which is equal to the minimum of the remaining credit (initial credit limit less any applicable transactions that have already been executed) from the first party to the second party and from the second party to the first party" (column 1, lines 34-41).

Claim 22, Togher teaches, "it should be understood that each Arbitrator also maintains a log of potential matches which have not yet been verified or canceled by the affected Market Access Node's, and that if these potential matches are not resolved within a predetermined time period, a similar automated rollback/recovery process can update the ARB's log..." (column 13, lines 34-40).

"A number of processing nodes (preferably in the form of MD's and ARB's) facilitate the distribution of price quotations and other market data and to execute transactions by matching eligible Market Makers with eligible Buyers and Sellers and by monitoring the transactions until they have been completed or aborted..." (column 6, lines 14-20).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Silverman et al. US Patent 5,136,501 Aug. 4, 1992. Anonymous Matching System.
- b) Ordish et al. US Patent 5,727,165 Mar. 10, 1998. Offer Matching System Having Timed Match Acknowledgement.
- c) Luke et al. US Patent 6,131,087 Oct. 10, 2000. Method for Automatically Identifying, Matching, and Near-Matching Buyers and Sellers in Electronic Market Transactions.
- d) Howorka US Patent 6,282,521 Aug. 28, 2001. Anonymous Trading System With Improved Quote Input Capabilities.

9. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefano Karmis whose telephone number is (703) 305-8130. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-1113.

Respectfully Submitted
Stefano Karmis
October 28, 2003


HANI M. KAZIMI
PRIMARY EXAMINER